

an optical deflector having a deflecting reflection surface adjacent to positions where said plurality of line images are formed for deflecting the pair of light beams;

a second image-formation system for separating the pair of light beams deflected by said optical deflector from each other in a direction of auxiliary scanning on a scanned surface and converging the pair of light beams as a plurality of light spots for optically scanning said scanned surface in accordance with deflection of the pair of light beams;

wherein

the plurality of light spots on the scanned surface optically scan scanning lines adjacent to each other, and

a lateral magnification β in a direction corresponding to the auxiliary scanning of the optical scanner between said light source and said scanned surface is as follows:

$$2 < \beta < 8.5.$$

5. (Once Amended Since Filing) A multi-beam optical scanner according to claim 1, further comprising a coupling lens for coupling [a] at least one light beam of said pair of light beams from said light source.

12. (Once Amended Since Filing) A multi-beam optical scanner according to claim 5, wherein said coupling lens is a collimate lens for collimating [a] said pair of light [beam] beams from said light source at the same time.

13. (Once Amended Since Filing) A multi-beam optical scanner comprising:
a pair of light beams;
a first image-formation system for focusing the pair of light beams [from the light source] in a direction corresponding to auxiliary scanning and forming the pair of light beams into images as a plurality of line images each having a longer side in a direction corresponding to main scanning;

an optical deflector having a deflecting reflection surface adjacent to positions where said plurality of line images are formed for deflecting the pair of light beams;

a second image-formation system for separating the pair of light beams deflected by said optical deflector from each other in a direction of auxiliary scanning on a scanned surface and converging the pair of light beams as a plurality of light spots for optically scanning said scanned surface in accordance with deflection of the pair of light beams;

wherein

the plurality of light spots on the scanned surface optically scan scanning lines adjacent to each other, and

a lateral magnification β in a direction corresponding to the auxiliary scanning of the optical scanner is as follows:

$$2 < \beta < 8.5.$$

14. An image forming apparatus comprising:

a multi-beam optical scanner including:

a light source for providing a pair of light beams;

a first image-formation system for focusing the pair of light beams from the light source in a direction corresponding to auxiliary scanning and forming the pair of light beams into images as a plurality of line images each having a longer side in a direction corresponding to main scanning;

an optical deflector having a deflecting reflection surface adjacent to positions where said plurality of line images are formed for deflecting the pair of light beams;

a second image-formation system for separating the pair of light beams deflected by said optical deflector from each other in a direction of auxiliary scanning on a scanned surface and converging the pair of light beams as a plurality of light spots for optically

scanning said scanned surface in accordance with deflection of the pair of light beams;
wherein

the plurality of light spots on the scanned surface optically scan scanning lines adjacent to each other, and

a lateral magnification β in a direction corresponding to the auxiliary scanning of the optical scanner is as follows:

$$2 < \beta < 8.5.$$

15. An image forming apparatus comprising:

a multi-beam optical scanner including:

a pair of light beams;

a first image-formation system for focusing the pair of light beams in a direction corresponding to auxiliary scanning and forming the pair of light beams into images as a plurality of line images each having a longer side in a direction corresponding to main scanning;

an optical deflector having a deflecting reflection surface adjacent to positions where said plurality of line images are formed for deflecting the pair of light beams;

a second image-formation system for separating the pair of light beams deflected by said optical deflector from each other in a direction of auxiliary scanning on a scanned surface and converging the pair of light beams as a plurality of light spots for optically scanning said scanned surface in accordance with deflection of the pair of light beams;

wherein

the plurality of light spots on the scanned surface optically scan scanning lines adjacent to each other, and